Raymond Werner/R2/USEPA/US

05/01/2009 04:21 PM

To Steven Riva/R2/USEPA/US@EPA, Viorica Petriman/R2/USEPA/US@EPA, Lionel MacKenzie/R2/USEPA/US@EPA

CC

Subject Fw: New Jersey response to the Draft letter to Garden State Offshore Energy - proposed permitting of met

fyi

Raymond Werner Chief, Air Programs Branch (212) 637-3706

--- Forwarded by Raymond Werner/R2/USEPA/US on 05/01/2009 04:20 PM -----



"Bill O'Sullivan" <Bill.O'Sullivan@dep.state.nj.</p>

To Raymond Werner/R2/USEPA/US@EPA

05/01/2009 03:43 PM

Subject Re: New Jersey response to the Draft letter to Garden State

Offshore Energy - proposed permitting of met

Ray, yes, appreciate the opportunity to consult. Bill

>>> <Werner.Raymond@epamail.epa.gov> 5/1/2009 3:37 PM >>> I understand. Of course EPA needs to consider the regulations within the context of the Outer Continental Shelf regulations which imposes additional requirements. I'm interpreting your email response as the conclusion of our informal consultation on the draft letter. You can expect that we will be finalizing this or a similar letter in the near future and that we will provide you with a copy.

Raymond Werner Chief, Air Programs Branch (212) 637-3706

> "Bill O'Sullivan" <Bill.O'Sullivan @dep.state.nj.us

> 05/01/2009 03:27

Raymond Werner/R2/USEPA/US@EPA

"Francis Steitz"

<Francis.Steitz@dep.state.nj.us>,

"John Preczewski"

<John.Preczewski@dep.state.nj.us> , Steven Riva/R2/USEPA/US@EPA

Subject

To

CC

Re: Fwd: Draft letter to Garden State Offshore Energy - proposed permitting of met tower

Ray - Thanks for sharing draft. If this were in NJ jourisdiction, only the electric generator for the met tower might need an air permit, depending on it's size. We do not require air permits for construction equipment, including generators that power construction equipment. Nor do we require air permits for barges or ships on navigable waters. (We would require a permit for a barge mounted electric generator connected to the electric grid, but that's not the case here.) WOS cc Steve, John, Frank

>>> Francis Steitz 5/1/2009 2:38 PM >>> Bill,

In practice NJ does not require air permits for vehicles or construction equipment. That said the if the electric generator used to power the met tower once it is constructed is over 37 kW or an combustion unit over 1 mmBTU/HR, not part of the construction, clearly needs an air permit. From speaking to enforcement I know in practice enforcement will not pursue action where equipment operated on a barges/boats if the barges/boats are located on a navigable water (stream, inlet, or ocean in this case). I don't think electric generators used to power construction equipment located on, or part of a barges/boats (especially where there is no option to connect to the grid) need permits, based on our historical practices.

As the letter is written, it says we concur with EPA's determination that construction engines and generators at the construction site need a Sub 8 permit. Clearly we do not. EPA should remove the line form their letter that states, "This position has been verified by the New Jersey Department of Environmental Protection."

Frank

>>> Bill O'Sullivan 4/23/2009 5:04:46 PM >>> John and Frank - Is this construction equipment or electric generating equipment? If the former, I don't think we would require a permit. Please discus internally, then with me, then with EPA. They make the final call on this, but optimally there would be consistency with what we would have done on land. I'm not sure EPA understands we do not require permits for vehicles or construction equipment. One of those grey areas of the minor facility permit rules. EPA might seek a permit just to be conservative, even if we don't require a permit. I'm likely OK with that, WOS

>>> <Werner.Raymond@epamail.epa.gov> 4/23/2009 3:49 PM >>>

Bill

As we discussed today here's a copy of the draft if you feel it is necessary we can certainly set up a call to walk you through our thinking in this regard.

Raymond Werner Chief, Air Programs Branch (212) 637-3706

---- Forwarded by Raymond Werner/R2/USEPA/US on 04/23/2009 03:36 PM

Steven Riva/R2/USEPA/US

04/23/2009 03:33

PM

To john.preczewski@dep.state.nj.us

Raymond Werner/R2/USEPA/US@EPA, Lionel MacKenzie/R2/USEPA/US@EPA, Viorica Petriman/R2/USEPA/US@EPA Subject

GSOE Letter

John,

Attached please find a file containing a draft letter that we intend to send to Garden State Offshore Energy next week. Please have your staff review and edit it as necessary to ensure we are not missing anything that NJ would like us to include. If you have any questions, give me a call. Thanks!

(See attached file: GSOE Letter.doc)

Ms. Carla Adduci Principal Air Quality Engineer TRC Environmental Corporation 1200 Wall Street West, 2nd Floor Lyndhurst, NJ 07071

Re: Applicability Determination for the Garden State Offshore Energy Proposed Offshore Meteorological Station

Dear Ms. Adduci:

By letter dated April 7, 2009, TRC Environmental Corporation, on behalf of Garden State Offshore Energy (GSOE), requested the U.S. Environmental Protection Agency (EPA)'s concurrence on a preliminary determination that the proposed GSOE meteorological station (met tower) neither requires a preconstruction permit nor needs to submit a Notice of Intent (NOI). Specifically, GSOE proposes to construct, operate, and decommission a meteorological station in federal waters approximately 16 to 20 miles off the coast of Southern New Jersey for the purpose of gathering data in order to determine whether the site is appropriate for the construction of a 350 megawatt (MW) wind farm. The met tower will be operated for approximately two to five years and will be removed at the end of that period. Based on information provided in your letter, EPA does not concur with your position and has determined that a minor source preconstruction permit is needed pursuant to N.J.A.C 7:27-8 "Permits and Certificates for Minor Facilities" (Subchapter 8) and a NOI is required to be submitted to the Regional Administrator pursuant to 40 CFR 55.4. Our rationales for these conclusions are delineated below.

N.J.A.C 7:27-8 "Permits and Certificates for Minor Facilities"

- Based on N.J.A.C 7:27-8.2 "Applicability" criteria, a commercial fuel burning
 equipment with a maximum rated heat input of 1,000,000 BTU/hr or greater, and any
 stationary reciprocating engine with a maximum rated power output of 37 kW or
 greater that is used for generating electricity, are significant sources and therefore
 require a permit. Neither commercial fuel burning equipment nor stationary
 reciprocating engines are defined in Subchapter 8.
- The definition of a stationary reciprocating engine is contained at N.J.A.C 7:27-19.1 "Definitions" (Subchapter 19) and means "....any reciprocating engine that remains for more than 30 days at a single site (for example, any building, structure, facility, or

installation)". Moreover, Subchapter 19 establishes oxides of nitrogen (NOx) emission limitations for stationary reciprocating engines that meet the above definition.

Consequently, under Subchapter 8, commercial fuel burning equipment with a rated heat input of at least 1,000,000 BTU/hr¹ is a significant source and requires an air permit regardless of how many days it remains at a single site. The fact that certain fuel burning equipment does not meet the definition of a stationary reciprocating engine would only exempt it from complying with Subchapter 19 provisions, but not from obtaining an air permit under Subchapter 8 or from complying with all other applicable New Jersey air regulations.

Thus, the generators proposed by Garden State Offshore Energy for the construction, operation, and decommissioning phases of their met tower with a rated power of at least 1,000,000 BTU/hr, are significant sources that need an air permit under Subchapter 8's provisions, and are also required to comply with all applicable air regulations. If the design or size of the GSOE's fuel combustion sources remain the same, then an air permit under Subchapter 8 would be required.

40 CFR 55.4 "Requirements to submit a notice of intent"

As stated at 40 CFR 55.4 (a)" Prior to performing any physical change or change in the method of operation that results in an increase in emissions, and no more than 18 months prior to submitting an application for preconstruction permit, the applicant shall submit a Notice of Intent to the Administrator through the EPA Regional Office...".

Consequently, since the proposed GSOE's met tower project results in an increase in emissions and also requires a preconstruction permit, a NOI including the items specified at 40 CFR 55.4 (b) should be submitted to EPA. The NOI should include the following:

- Geophysical and geotechnical site survey related emissions (equipment associated with the seabed boring operations):
 - Emissions from diesel powered drilling equipment.
 - Emissions from support vessel engines and portable generators used on vessels and barges resulting during the boring operations while the vessels or barges are attached to the seabed.

The vessel engines' emissions en route to the site before any boring occurs need not be included in the potential to emit.

Based on our calculations 1,000, 000 BTU/hr converts to approximately 107 kW. The typical equipment list (page 2 of 5 of your letter) mentions generators rated at 250 kW. Thus, a generator equal to or greater than 107 kW (i.e. 250 kW) would have a heat input rate equal to or greater than the applicability threshold of 1,000,000 BTU/hr.

- Installation of met tower related emissions (equipment involved in pile and platform installation, etc.):
 - Emissions from the diesel powered cranes, pile hammer, etc.
 - Emissions from vessels, crane barges, tugboats, and portable generators on vessels, barges, or tugboats (if attached to the ocean floor).
 - Emissions from supply vessel engines, crew boats, tugboats, and portable generators on vessels, barges, tugboats en route to or from the met tower.
- Operation of met tower related emissions (diesel powered generators on the met tower platform, diesel storage tank and maintenance vessels en route to or from the met tower):
 - Emissions from the diesel powered generators and diesel storage tank.
 - Emissions from maintenance vessels en route to or from the met tower.
- Decommission of met tower related emissions (equipment involved in removing the piles, platform, etc.):
 - Emissions from diesel powered cranes and dredgers.
 - Emissions from vessels, crane barges, tugboats, and portable generators on vessels, barges or tugs (if attached to the ocean floor).
 - Emissions from supply vessel engines, crew boats, tugboats, and portable generators on vessels, barges, or tugboats en route to or from the met tower.

Additionally, the following information shall be provided for each combustion source included in the NOI:

- Make/Model (if available).
- Combustion Source Description: type (i.e. portable, marine engine, etc), function performed (i.e. generating electricity, producing mechanical power, etc.), and number of days on site.
- Source rating: max. Gross heat input (MMBTU/hr), electrical output (kW), and power output (BHP).
- Emission factors of air contaminants: g/BHP-hr, g/kW-hr, lb/MMBTU, etc., and source of emission factors.
- Fuel: type, amount, and sulfur content.
- Operating hours: number of hours per phase of the met tower project.
- Emission rates: hourly emissions (lb/hr), annual emissions (TPY), and all equations, formulas and assumptions used to calculate the emissions.

EPA values the important role that wind energy plays in meeting the environmental and energy challenges of our country and, thus, recognizes that the GSOE's wind farm project is an essential component of developing electricity from clean and renewable power. For this reason, EPA is prepared to help GSOE to move forward with this project while ensuring that a permit meeting the requirements of the CAA and associated rules and regulations is issued. We look forward to working with GSOE on this project and hope that this letter facilitates these efforts.

If we can answer any questions regarding our comments, please feel free to call my office at 212-637-4074, or to speak with Ms. Viorica Petriman at 212-637-4021 and Lionel Mackenzie at 212-637-3770.

Sincerely,

Steven Riva, Chief Permitting Section Air Programs Branch

cc: Erin Gorman, PSEG John Preczewski, NJDEP bcc: L. Mackenzie, APB V. Petriman, APB S. Riva, APB OCS Source file File copy